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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/991,774

11/05/2001

Shigenori Morikawa

01711/LH

5900

1933 7590 06/29/2007
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EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

06/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/991,774

Applicant(s)

MORIKAWA, SHIGENORI

Examiner

Blanche Wong

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 5, 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6, 11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6, 11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed April 5, 2007, have been fully considered but they are not persuasive.

With regard to claim 6 and primary art Ito, Applicant states that "[a]ccording to claim 6, moreover, the communication terminal comprises: means for recognizing a start and an end of transmission/reception of a set of transmitted/received objective data; means for measuring a transmitted/received data amount ...; means for judging ... has reached a specified data amount; means for, ..., warning a user that the transmitted/received data amount has reached the specified data amount; and means for setting an upper limit value" (Remark, p.3, para. 3) and Ito does not disclose any of these limitations. However, Examiner respectfully disagrees. Applicant does not have an issue with the limitation "data communication means" in Ito. Even if Applicant is arguing that Ito does not disclose a data communication means for connecting to a communication network, in which accounting is made according to a transmitted/received data amount, to carry out data communication, secondary art Jonsson also reads on this limitation. According to the Applicant, "Jonsson recognizes that users are charged for airtime on a telephone network" Remark, p.11, para. 4.

The first issues relates to the means for recognizing a start and an end of transmission/reception of a set of transmitted/received objective data. A window recognizes a start and an end of transmission/reception of a set of transmitted/received object data. Therefore, a window reads on this limitation in claim 6.

The second issue relates to the means for measuring a transmitted/received data amount from the start to the end of transmission/reception of the set of objective data. Applicant states that “[e]ach time a user device transmits a “cell”, the value of the window counter decrements. Remark, p.4, para. 3. Whether the window counter decrements or increments, it is a means of measuring a transmission/received data amount. Additionally, a set of transmitted/received object data is still data. That is, data is also a set of data. Therefore, the window counter reads on this limitation in claim 6.

With regards to the means for warning a user that the transmitted/received data amount has reached the specified data amount, the third issue relates to judging that the measured transmitted/received data amount has reached the specified data amount. Applicant states that “Ito et al does not perform any judgment based on the count of the window counter”. Remark, p.8, para. 3. Cell loss is judged from cells not transmitted. It is another way of judging the measured transmitted/received data amount. Applicant agrees that “the cell loss judging unit includes buffer monitoring circuits”. Remark, p.7, para. 2. Buffers can store a specified data amount. Therefore, the cell loss judgment unit reads on this limitation in claim 6.

The fourth issue relates to the means for setting an upper limit value. It is trivial that all data communication systems have thresholds, that is, an upper limit value. Therefore, Ito’s reads on this limitation in claim 6.

With regard to claim 6 and secondary art Jonsson, Applicant states that Jonsson does not disclose structural features. Examiner respectfully disagrees. The feature of Jonsson that Examiner relied upon is also clearly stated by the Applicant, “Jonsson

recognizes that users are charged for airtime on a telephone network". Remark, p.11, para. 4. If Applicant is arguing structure of the accounting feature, such a limitation is not recited in the claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., structure of accounting feature) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

With regard to claim 6 and secondary art Davitt, Applicant states that Davitt is not properly combinable with Ito to achieve the limitation when transmission/reception of data is not suspended but continued after it is judged that the transmitted/received data amount has reached the specified data amount, the upper limit value is temporarily increased (Remark, p.14, para. 1) because Applicant also states that Ito teaches away from temporarily increasing a threshold (Remark, p.13, para. 2). However, it would be obvious and highly effective of Ito to combine with Davitt so that Ito has the ability to temporarily increase a threshold because in that way, Ito can reduce immediate cell abandonment and data amount flow disruption when an upper limit/threshold value is reached. Examiner clarifies this motivation in the rejection below.

With regard to claim 11, Applicant states "On the other hand, when the communication terminal is connected to the communication network in which charging is executed on the basis of the connection period (time), transmission/reception of data

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is terminated without waiting for the user's instructions" (Remark, p.16, para. 1) and "By contrast, Dacloush et al discloses an invention relating to a prepaid calling card. ... the caller is given an opportunity to increase the amount of money in the prepaid account so as to continue the call. ... after providing the caller with an opportunity to provide payment, the calling card is allowed to be depleted and then the call is terminated" (Remark, p.16, para. 2). However, Examiner respectfully disagrees. Applicant does not have an issue with limitation (i) in claim 11 because "the caller is given an opportunity to increase the amount of money in the prepaid account so as to continue the call. ... after providing the caller with an opportunity to provide payment" reads on limitation (i). The issue is with limitation (ii) in claim 11. With regard to limitation (ii) in claim 11, Dacloush further discloses "[a]t the end of the [20 seconds] ... the call is terminated ...", col. 4, lines 59-60. There is terminating transmission/reception of the data to be transmitted/received without waiting for the instruction from the user at the end of the 20 seconds period.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 11 and 13** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Dacloush et al. (U.S. Pat No. 6,700,961).

With regard to claim 11, Dacloush discloses

means for carrying out data communication (**telephone switch 105, col. 2, lines 45**) via a communication network (**toll network 107 in Fig. 1, col. 2, line 52**) where accounting is made according to connection time (**duration of the call, col. 3, line 31**);

means for setting a limit amount of a communication charge (**prepaid calling card, col. 3, line 53**);

means for calculating the communication charge required for data communication in real time according to the selected communication network (**SCP**)(**computes the cost per time of the call ... and then times the duration of the call, col. 3, lines 29-34; see also money value file on an SCP, col. 3, lines 46-47**);

means for judging whether or not the calculated communication charge has reached the limit amount of communication charge (**timer**)(**a timer is started for a period of time equal to or somewhat shorter than the maximum calculated time, col. 4, line 6**);

means for, when it is judged that the calculated communication charge has reached the limit amount (**when a time out is detected, col. 4, line 26**), warning a user (**call originator**) that the calculated communication charge has reached the limit

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amount **(a tone or other announcement is played to call originator, col. 4, lines 29-30); and**

means for, when the calculated communication charge has reached the limit amount, (i) temporarily suspending transmission/reception of data **(on hold, col. 4, line 31)** when connected to the communication network where accounting is made according to the data amount, and waiting for an instruction to resume or terminate connection from a user **(call originator) (the tone or announcement calls for a response from the call originator to provide new prepayment value against which future parts of the connection may be charged, col. 4, lines 32-35)**, and (ii) terminating transmission/reception of the data to be transmitted/received **(call is terminated [at the end of the timer period])** without waiting for the instruction from the user when connected to the communication network where accounting is made according to the connection time **(times out) (when the call originator does not respond to the tone ... the timer times out and the call is terminated, col. 4, lines 54-60).**

With regard to claim 13, Dacloush further discloses

means for ending communication connection **(call is terminated)** immediately when terminating transmission/reception of the data to be transmitted/received without waiting for the instruction from a user **(call originator)**, when connected to the communication network where accounting is made according to the connection time **(times out) (when the call originator does not respond to the tone ... the timer times out and the call is terminated, col. 4, lines 54-60).**

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (U.S. Pat No. 5,539,747) in view of Jonsson (U.S. Pat No. 6,115,613) and Davitt et al. (U.S. Pat No. 6,463,139).

With regard to claim 6, Ito discloses

data communication means for connecting to a communication network (**network device 110 in Fig. 1, col. 6, line 62**) to carry out data communication (**a plurality of communication paths 121-124 in Fig. 1, col. 6, line 61**);

means for recognizing a start and an end of transmission/reception (**each user device has a counter called a window counter**", col. 7, lines 1-2) of a set of transmitted/received objective data ("**... each of [user devices] communications with other user devices ... transmitting to/receiving from cells**", col. 6, line 64-col. 7, line 1);

means for measuring (**window counter**) a transmitted/received data amount from the start to the end of transmission/reception of the set of objective data;

means for judging (**cell loss possibility judging unit 120 in Fig. 1, col. 7, line 66**) whether or not the measured transmitted/received data amount has reached a specified data amount;

means for (**cell loss possibility judging unit**), when it is judged that the measured transmitted/received data amount has reached the specified data amount, warning a user that the transmitted/received data amount has reached the specified data amount ("**The cell loss possibility judging unit 120 judges as for each of the output buffers if cell abandonment is likely to occur (overflow). Subsequently, if the cell loss possibility judging unit judges that an output buffer is likely to abandon cells, it notifies the traffic controller ...**", col. 8, lines 10-12); and

means for setting an upper limit value (**window counter**) corresponding to a maximum allowed data amount from continuous transmission/reception of any set of objective data;

wherein the judgment by the judging means is performed such that, when the set upper limit value is reached, it is judged that the transmitted/received data amount has reached the specified data amount ("**The cell loss possibility judging unit 120 judges as for each of the output buffers if cell abandonment is likely to occur (overflow). Subsequently, if the cell loss possibility judging unit judges that an output buffer is likely to abandon cells, it notifies the traffic controller ...**", col. 8, lines 10-12).

However, Ito fails to explicitly show a data communication means in which accounting is made according to a transmitted/received data amount and wherein when

transmission/reception of data is not suspended but continued after it is judged that the transmitted/received data amount has reached the specified data amount, the upper limit value is temporarily increased.

Jonsson discloses a data communication means in which accounting is made according to a transmitted/received data amount ("**...threshold of allowable ... billing, col. 7, lins 46-48**"). Davitt discloses when transmission/reception of data is not suspended (**automatic overflow treatment, col. 4, line 25**) but continued after it is judged that the transmitted/received data amount has reached the specified data amount (**monitors the running cost, col. 3, line 57**), the upper limit value is temporarily increased ("**continuing**" **call charges, col. 4, line 34**).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine accounting that is made according to a transmitted/received data amount as taught in Jonsson, and transmission/reception of data is not suspended when the transmitted/received data amount has reached the specified data amount and the upper limit value is temporarily increased as taught in Davitt with Ito in order to provide for effective billing and to reduce immediate cell abandonment and data amount flow disruption.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RW

BW

June 22, 2007

Daniel J. Ryman
Patent Examiner
AU 2616

Daniel Ryman